Attachment 9

LABOR CATEGORY DESCRIPTIONS

A. FACILITIES PLANNING AND DESIGN LABOR CATEGORIES

Civil, Electrical, Mechanical, Chemical, Structural, Sanitary, Environmental and Soils Engineer

Education: A four-year degree in an engineering curriculum is required along with professional registration, where applicable.

Responsibilities: Applies engineering skills to complex tasks in respective engineering discipline to meet task or project time and budget goals. Applies these skills to develop and implement innovative technical approaches to solve problems for clients. The engineer performs engineering calculations and designs. He works under the direction of a senior engineer or project manager.

Engineering Technician

Education: A minimum high school education is required and some technical training beyond high school preferred.

Responsibilities: Applies skills and responsibilities proficiently in performing field tests and sampling. Performs delegated responsibilities and duties independently where engineering precedent exists or where work is covered by standards or complete plans and specifications. Applies advanced skills for computations for field and laboratory tests, and quantity estimates.

Architect

Education: A Bachelor's degree in architecture is required and professional registration is expected 90% of the time (where applicable).

Responsibilities: Applies advanced skills to complex tasks in architecture discipline to meet task or project time and budget goals. Applies these advanced skills to develop and implement innovative technical approaches to solve problems for clients. Publishes peer-reviewed technical papers, if appropriate and conducts technical peer reviews.

Estimator

Education: A Bachelor's degree in engineering or a related technical field is required.

Responsibilities: Applies skills and responsibilities proficiently in preparing cost estimates within the established time schedule and budget constraints. Effectively works with Project Manager to solve technical problems.

AutoCad Drafter

Education: A minimum high school education is required with some type of autocad training experience.

Responsibilities: Applies skills and responsibilities proficiently in preparation of drawings and exhibits from conceptual ideas and sketches. Applies basic skills and knowledge of AutoCad to new tasks in order to properly layout drawings for clarity and conformance with client requirements.

Specifications Writer

Education: A bachelor's degree in a technical discipline is required.

Responsibilities: Applies skills and responsibilities in the preparation of technical specifications within time and schedule constraints established. Technical understanding of construction processes and clear writing skills are necessary.

Clerical

Education: Has basic skills and entry level knowledge of software applications. A minimum high school education is required.

Responsibilities: Acts under limited supervision to perform duties such as managing flow of work, performing in a timely manner, demonstrating knowledge of office operations and procedures, and exhibiting proficiency in operating office machines.

Senior Engineer

Education: A Bachelor's degree in a scientific discipline is required. Professional registration, where applicable is also required.

Responsibilities: Applies advanced skills to complex tasks, sharing knowledge skills with others in their respective discipline, meeting task and project time and budget controls. Effectively works with client project manager to solve technical problems. Leverages

existing skills and responsibilities by preparing technical papers and conducting peer reviews and mentoring others to do the same. The senior engineer has basic skills in technical leadership for higher risk work.

Scientist

Education: A Bachelor's degree in a scientific discipline is required. The staff used in this category would have a registration, in 70% of the cases where one exists.

Responsibilities: Applies a range scientific skills to complex tasks, sharing knowledge skills with others in respective scientific discipline, meeting task and project time and budget controls. Effectively works with client project manager to solve technical problems. Expands existing skills and responsibilities to begin to prepare technical papers and conduct peer reviews.

Biologist

Education: A Bachelor's degree in a scientific discipline is required.

Responsibilities: Applies technical skills to complex tasks, sharing knowledge skills with others in the biology discipline, meeting task and project time and budget controls. Effectively works with client project manager to solve technical problems. Expands existing skills and responsibilities by preparing technical papers and conducting peer reviews.

Environmental Planner

Education: A Bachelor's degree in a scientific discipline is required.

Responsibilities: Applies planning skills to complex tasks, sharing knowledge skills with others in the planning discipline, meeting task and project time and budget controls. Effectively works with client project manager to solve technical problems. Expands existing skills and responsibilities to begin to prepare technical papers and conduct peer reviews.

B. PORT SITE SURVEY LABOR CATEGORIES

Senior Commercial Communications Engineer

Education: Minimum BS and MS degree in electrical or communications engineering, mathematics, computer science or a physical science including courses in Open Systems Integration (OSI) technology, OSI architecture, OSI standards and OSI protocols. Two additional years of specific experience intensively involved in areas directly relating to the contract may be substituted for the MS degree. Ten years of professional experience including five years specific experience.

Responsibilities: Responsibility for the development, design, test and evaluation of satellite communication systems including IMARSAT, QualComm, Irridium or VSAT. Responsibility for development, design, operation, test and evaluation of local and wide area networks including Ethernet, Internet, X.25, X.400, routers, gateways and fiber optics. Responsibility for development, design, operation, test and evaluation of UHF/VHF/HF voice and data communications systems. Knowledge of standards such as ISO, ANSI, CCITT, IEEE and NIST. Responsibility for development, design, operation, test and evaluation of meteor burst communications systems. Responsibility for the development, design, operation, test and evaluation of mobile communications systems for the marine environment.

Senior Communications Analyst

Education: Minimum BS and MS degree in electrical or communications engineering, mathematics, computer science or a physical science including courses of study in OSI technology, OSI architecture, OSI standards and OSI protocols. Two additional years of specific experience intensively involved in areas directly relating to the contract may be substituted for the MS degree. Ten years of professional experience including five years specific experience.

Responsibilities: Responsibility for the development or analysis of communications requirements in the ship-shore-air environment for the collection and compilation of user views to document and support requirements, for the identification and documentation of associated communications parameters such as type of service, latency, security, probability of detection and intercept, robustness, degree of error, etc. Responsibility for the analysis of communications costs in the ship-shore-air environment for the collection of raw cost data including capital plant, personnel, training and recurring services and for the use of statistical methods to develop past, current, and projected cost estimates. Responsibility for the development, design or analysis of open system communications architectures in the ship-shore-air environment that support the sense-decide-act scenario of command and control.

Communications Technician

Education: Minimum of a Technical School Certificate or a Coast Guard or Navy “B” School in communications, data systems or network systems. Five years of communications technician demonstrated experience

Responsibilities: Interconnecting systems using RS-232, RS-422 and MIL-STD-188-114 Fiber Optics signaling levels. Operation of communications software programs that

require setting parameters such as the number of stop bits, baud rate, word length, flow control and error checking. Interconnecting NMEA-0183, 0180 compliant devices. Working knowledge of X.25, IEEE-802 Series, TCP/IP, OSI, FDDI, Internet, Ethernet and Fiber Optic networks. Working knowledge of UHF/VHF/HF mobile and shore communications systems.

Technical Editor

Education: Minimum of BA degree in English or Technical Writing. Five years of writing and editing technical documents

Responsibilities: Drafting, editing and producing text for technical reports, manuals, instructions, letters and government publications. Integrating tables, graphs, photographs and text. Creating documents that were deliverables to government contracts. Publishing documents that meet requirements of government technical information services such as National Technical Information Service.

Word Processor

Education: High School diploma and completion of training in word processing with commercial word processor software such as Word, WordPerfect or equivalent. One year of word processing experience.

Responsibilities: Creating professional quality reports and other materials. Creating, editing, printing and archival of text, graphics and tables. Proof reading text for typographical errors, double words, proper spacing, proper margins, type size and missing characters.

Illustrator/Draftsman

Education: Technical drafting school diploma with courses of study in Computer Aided Design (CAD).

Responsibilities: Preparing Level III Engineering Drawings in CAD. Preparing Installation and Installation Control Drawings in CAD. Preparing engineering drawings and illustrations for technical manuals. Preparing two and three dimensional illustrations for technical documentation, training documentation and reports. Participating in site surveys for the development of installation design drawings.

C. SOFTWARE MODIFICATION LABOR CATEGORIES

Senior Computer System Analyst

Education: Bachelor's degree in Computer Science, Information Systems, Engineering, Business or other related scientific or technical discipline

Responsibilities: Provides technical and administrative direction for personnel performing software development tasks, including the review of work products for correctness, adherence to the design concept and to user standards, and for progress in accordance with schedules Coordinates with the Program Manager to ensure problem solution and user satisfaction. Makes recommendations, if needed, for approval of major system installations Prepares milestone status reports, deliverables, and presentations on the system concept to colleagues, subordinates, and end user representatives. Provides daily supervision and direction to support staff

Computer Systems Analyst

Education: A Bachelor's degree in Computer Science, Information Systems, Engineering, Business

Responsibilities: Analyzes and develops computer software possessing a wide range of capabilities, including numerous engineering, business, and records management functions. Develops plans for automated information systems from project inception to conclusion. Analyzes the business problem, and develops system requirements and program specifications, from which programmers prepare detailed information models, function and process models, data flows, programs, and tests. Coordinates closely with programmers to ensure proper implementation of program and system specifications. Develops, in conjunction with functional users, system alternative solutions.

Senior Software Engineer

Education: A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline.

Responsibilities: Analyzes complex system and software requirements. Designs and/or implements software tools and subsystems to support software reuse and domain analyses. Manages software development and support using formal specifications, information and process models, other accepted design techniques and Computer Aided Software Engineering (CASE) tools Estimates software development costs and schedules. Reviews existing and developed programs and assists in making refinements, reducing operating time, and improving current techniques. Supervises software configuration management.

Application Programmer/Software Engineer

Education: A Bachelor degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline

Responsibilities: Analyzes functional business applications and design specifications for

functional areas such as accounting, finance, and logistics. Develops block diagrams, information and process models, and logic flow charts Translates detailed design into computer software. Tests, debugs, and refines the computer software to produce the required product. Prepares required documentation, including both program-level and user-level documentation. Enhances software to reduce operating time and resource requirements, and improve efficiency. Provides technical direction to programmers as required to ensure program deadlines are met.

Database Management System Specialist

Education: A Bachelor's degree in Computer Science, Information Systems, Engineering, Business, or other related scientific or technical discipline.

Responsibilities: Manages development of complex database projects. Provides highly technical expertise in the use of relational database management systems. Develops and documents logical and physical database structures to support application development to meet validated user requirements. Defines file organizations, indexing methods, security procedures , and database designs that optimize application performance for specific user applications.

Documentation Specialist

Education: A Bachelor's degree in English, Literature, or other related discipline applicable to this position.

Responsibilities: Gathers, analyzes, and composes technical information. Conducts research and ensures the use of proper technical terminology. Translates technical information into clear, readable documents to be used by technical and non-technical personnel. Prepares functional specifications, system specifications, user manuals, special reports and other customer deliverables and documents.